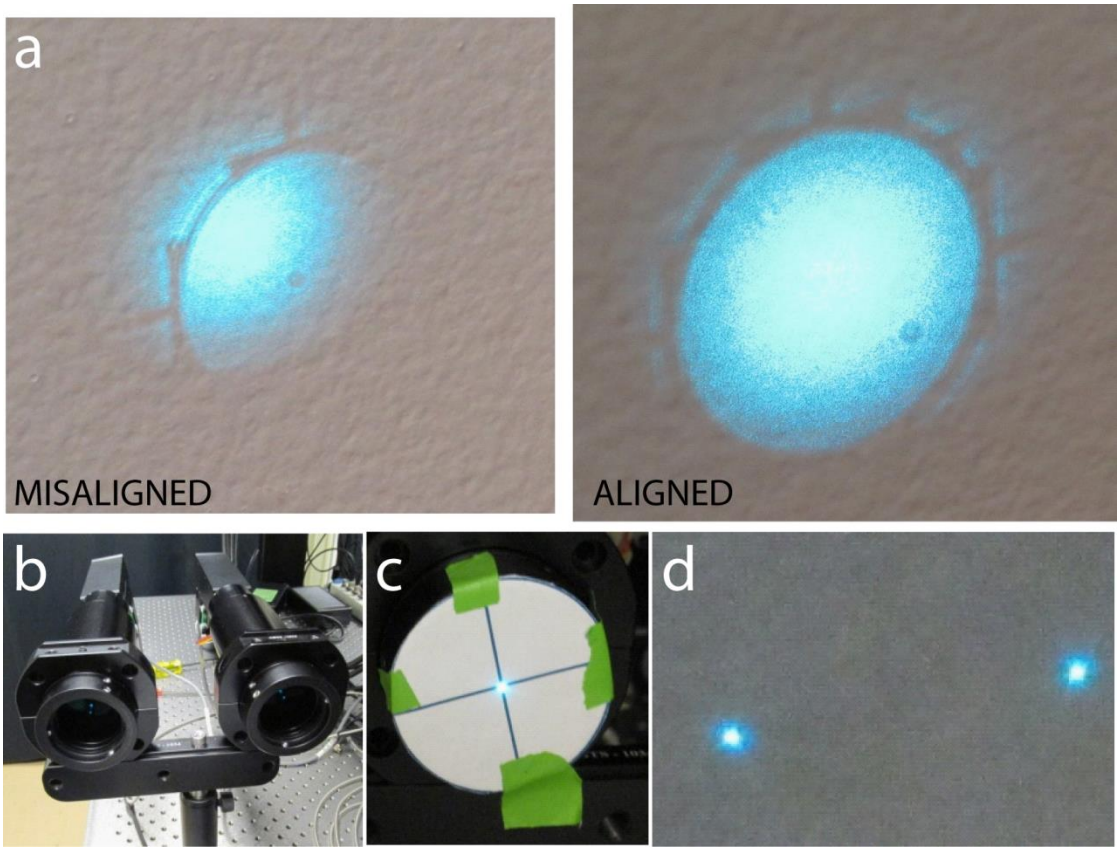
Diagnostics for assessing excitation input to diSPIM



a. After projecting the excitation beam through the scanner onto a far screen or wall (approximately 1 meter from the output of the scanner, without mounting the tube lens), the beam should fill the image of the 2D MEMS mirror (right). An example of a misaligned beam is shown at left: note that the MEMS mirror is underfilled and the beam spills off the MEMS aperture. **b.** When checking centration and collimation of the beams through the scanner + tube lens assemblies, we mount them together on the bracket (ASI, Cat. # B1013 & B1034) as shown. **c.** Attaching a circular piece of white paper (2 inches in diameter) to the output of each tube lens is helpful in assessing beam centration. **d**. When properly collimated, both beams should maintain their size, and appear the same size at a screen placed far from the tube lens face (here a wall 5 meters from the output of each tube lens was used to assess mutual beam size).

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